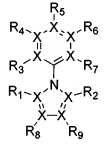
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-68. (Canceled)

69. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting cells with an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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wherein X can be C or N, and when N is at any X position, the corresponding R group is not there;

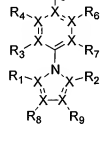
R_1 and R_2 are independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, phenyl, halogen, CN, nitro, OH and OR, where R is alkyl; and

R_3, R_4, R_5, R_6, R_7, R_8 and R_9 are each independently selected from the group consisting of H, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, arylalkyl, heterocyclyl, tetrazolyl, halogen, CHO, OH, CN, NO_2, OR, where R is alkyl, NHR, where R is H or alkyl, COOR, where R is H or

alkyl, SO_3R, where R is H or alkyl, and SO_2NHR, where R is H or alkyl.

70. (New) The method of claim 69, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

71. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



I

wherein X can be C or N, and when N is at any X position, the corresponding R group is not there;

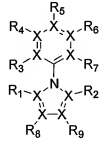
R_1 and R_2 are independently selected from the group consisting of H, alkyl, alkenyl, alkynyl, phenyl, halogen, CN, nitro, OH and OR, where R is alkyl; and

R_3, R_4, R_5, R_6, R_7, R_8 and R_9 are each independently selected from the group consisting of H, alkyl, cycloalkyl, alkenyl, alkynyl, aryl, arylalkyl, heterocyclyl, tetrazolyl, halogen, CHO, OH, CN, NO_2, OR, where R is

alkyl, NHR, where R is H or alkyl, COOR, where R is H or alkyl, SO_3R, where R is H or alkyl, and SO_2NHR, where R is H or alkyl.

72. (New) The method of claim 71, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

73. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting cells with an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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wherein X is C;

R_1 is selected from the group consisting of H and methyl;

R_2 is selected from the group consisting of H, methyl and phenyl;

R_3 is selected from the group consisting of H and methyl;

R_4 is selected from the group consisting of H, OH and COOH;

R_5 is selected from the group consisting of H, OH, Cl, $COOCH_3$ and COOH;

R_6 is selected from the group consisting of H, Cl and COOH;

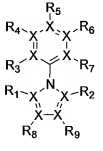
R_7 is selected from the group consisting of H, OH and methyl;

R_8 is selected from the group consisting of H and CHO; and

R_9 is H.

74. (New) The method of claim 73, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

75. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



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wherein X is C;

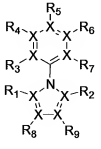
R_1 is selected from the group consisting of H and methyl;

R_2 is selected from the group consisting of H, methyl and phenyl;

R_3 is selected from the group consisting of H and methyl;
R_4 is selected from the group consisting of H, OH and COOH;
R_5 is selected from the group consisting of H, OH, Cl, $COOCH_3$ and COOH;
R_6 is selected from the group consisting of H, Cl and COOH;
R_7 is selected from the group consisting of H, OH and methyl;
R_8 is selected from the group consisting of H and CHO; and
R_9 is H.

76. (New) The method of claim 75, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

77. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting cells with an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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wherein X is C, R_4 is COOH, and one of the following:

(a) R_1 is methyl, R_2 is phenyl, R_5 is OH, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(b) R_1 is methyl, R_2 is phenyl, R_5 is Cl, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(c) R_1 is methyl, R_2 is phenyl, and each of R_3, R_5, R_6, R_7, R_8 and R_9 is H; or

(d) R_1 and R_2 are each methyl, R_5 is OH, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(e) R_5 is Cl, and each of R_1, R_2, R_3, R_6, R_7, R_8 and R_9 is H; or

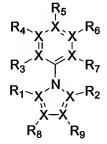
(f) R_1 and R_2 are each methyl, R_6 is COOH, and each of R_3, R_5, R_7, R_8 and R_9 is H; or

(g) R_1 and R_2 are each methyl, R_7 is OH, and each of R_3, R_5, R_6, R_8 and R_9 is H; or

(h) each of R_1, R_2, R_3, R_5, R_6, R_7, R_8 and R_9 is H.

78. (New) The method of claim 77, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

79. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



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wherein X is C, R_4 is COOH, and one of the following:

(a) R_1 is methyl, R_2 is phenyl, R_5 is OH, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(b) R_1 is methyl, R_2 is phenyl, R_5 is Cl, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(c) R_1 is methyl, R_2 is phenyl, and each of R_3, R_5, R_6, R_7, R_8 and R_9 is H; or

(d) R_1 and R_2 are each methyl, R_5 is OH, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(e) R_5 is Cl, and each of R_1, R_2, R_3, R_6, R_7, R_8 and R_9 is H; or

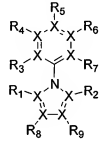
(f) R_1 and R_2 are each methyl, R_6 is COOH, and each of R_3, R_5, R_7, R_8 and R_9 is H; or

(g) R_1 and R_2 are each methyl, R_7 is OH, and each of R_3, R_5, R_6, R_8 and R_9 is H; or

(h) each of R_1, R_2, R_3, R_5, R_6, R_7, R_8 and R_9 is H.

80. (New) The method of claim 79, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

81. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting cells with an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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wherein X is C, R_1 and R_2 are each methyl, R_5 is COOH, and one of the following:

(a) R_4 is OH, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(b) R_6 is Cl, and each of R_3, R_4, R_7, R_8 and R_9 is H; or

(c) each of R_3, R_4, R_6, R_7, R_8 and R_9 is H; or

(d) R_6 is Cl, R_8 is CHO, and each of R_3, R_4, R_7 and R_9 is H; or

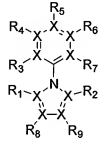
(e) R_7 is OH, and each of R_3, R_4, R_6, R_8 and R_9 is H; or

(f) R_7 is methyl, and each of R_3, R_4, R_6, R_8 and R_9 is H; or

(g) R_8 is CHO, and each of R_3, R_4, R_6, R_7 and R_9 is H.

82. (New) The method of claim 81, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

83. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



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wherein X is C, R_1 and R_2 are each methyl, R_5 is COOH, and one of the following:

(a) R_4 is OH, and each of R_3, R_6, R_7, R_8 and R_9 is H; or

(b) R_6 is Cl, and each of R_3, R_4, R_7, R_8 and R_9 is H; or

(c) each of R_3, R_4, R_6, R_7, R_8 and R_9 is H; or

(d) R_6 is Cl, R_8 is CHO, and each of R_3, R_4, R_7 and R_9 is H; or

(e) R_7 is OH, and each of R_3, R_4, R_6, R_8 and R_9 is H; or

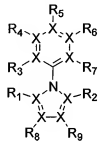
(f) R_7 is methyl, and each of R_3, R_4, R_6, R_8 and R_9 is H; or

(g) R_8 is CHO, and each of R_3, R_4, R_6, R_7 and R_9 is H.

84. (New) The method of claim 83, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

85. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting

cells with an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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wherein X is C, R_6 is COOH, and one of the following:

(a) R_1, R_2 and R_7 are each methyl, and each of R_3, R_4, R_5, R_8 and R_9 is H; or

(b) R_1 and R_2 are each methyl, and each of R_3, R_4, R_5, R_7, R_8 and R_9 is H; or

(c) R_7 is methyl, and each of R_1, R_2, R_3, R_4, R_5, R_8 and R_9 is H; or

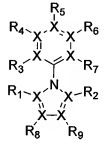
(d) R_1 and R_2 are each methyl, R_5 is Cl, and each of R_3, R_4, R_7, R_8 and R_9 is H; or

(e) R_1, R_2 and R_3 are each methyl, and each of R_4, R_5, R_7, R_8 and R_9 is H.

86. (New) The method of claim 85, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

87. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said

mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



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wherein X is C, R_6 is COOH, and one of the following:

(a) R_1, R_2 and R_7 are each methyl, and each of R_3, R_4, R_5, R_8 and R_9 is H; or

(b) R_1 and R_2 are each methyl, and each of R_3, R_4, R_5, R_7, R_8 and R_9 is H; or

(c) R_7 is methyl, and each of R_1, R_2, R_3, R_4, R_5, R_8 and R_9 is H; or

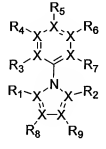
(d) R_1 and R_2 are each methyl, R_5 is Cl, and each of R_3, R_4, R_7, R_8 and R_9 is H; or

(e) R_1, R_2 and R_3 are each methyl, and each of R_4, R_5, R_7, R_8 and R_9 is H.

88. (New) The method of claim 87, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

89. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting cells with an effective amount of a compound of the

formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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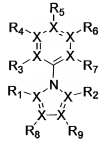
wherein X is C, R_1 and R_2 are each methyl, R_5 is $COOCH_3$, and each of R_3, R_4, R_6, R_7, R_8 and R_9 is H.

90. (New) The method of claim 89, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

91. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



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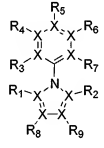
wherein X is C, R_1 and R_2 are each methyl, R_5 is $COOCH_3$, and each of R_3, R_4, R_6, R_7, R_8 and R_9 is H.

92. (New) The method of claim 91, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

93. (New) A compound of the formula I, or a pharmaceutically acceptable salt thereof,



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wherein X is C; R_1 and R_2 are CH_3; R_3 is H; R_4 is OH; R_5 is COOH; and R_6, R_7, R_8 and R_9 are each H.

94. (New) A pharmaceutical composition comprising an effective amount of the compound of claim 93.

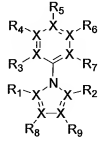
95. (New) A method for inhibiting replication of human immunodeficiency virus in cells, comprising contacting the cells with the pharmaceutical composition of claim 94.

96. (New) The method of claim 95, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

97. (New) A method for treating mammals infected with the human immunodeficiency virus, or treatment of Acquired Immunodeficiency Syndrome (AIDS) in a subject, comprising administering to said mammals or subject the pharmaceutical composition of claim 94.

98. (New) The method of claim 97, further comprising administering to said mammals or subject an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

99. (New) A method for inhibiting replication of human immunodeficiency virus in cells comprising contacting cells with an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier, to inhibit the replication of the human immunodeficiency virus,



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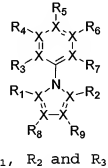
wherein X is C; R_1, R_2 and R_3 are each H; R_4 is COOH; R_5 is Cl; and R_6, R_7, R_8 and R_9 are each H.

100. (New) The method of claim 99, further comprising contacting cells with an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.

101. (New) A method for treating mammals infected with the human immunodeficiency virus, comprising administering to said mammals an effective amount of a compound of the formula I, or its pharmaceutically acceptable salt and a pharmaceutically acceptable carrier,



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wherein X is C; R_1, R_2 and R_3 are each H; R_4 is COOH; R_5 is Cl; and R_6, R_7, R_8 and R_9 are each H.

102. (New) The method of claim 101, further comprising administering to said mammals an effective amount of an Acquired Immunodeficiency Syndrome (AIDS) treatment agent selected from the group consisting of anti-HIV agents, anti-infective agents, and immunomodulators.